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ABSTRACT

This document describes heart rate detection with multi-use capacitive touch sensors. Fluctuations in capacitance are detected (802) using capacitive touch sensors. These capacitive touch sensors are also used to detect touch inputs to control operations of a computing device. When contact of a person's hand with the computing device is detected, the capacitive touch sensors produce raw capacitance data that indicates detected capacitance fluctuations. The raw capacitance data is extracted (902) from the capacitive touch sensors using a modified device driver that bypasses default driver configurations that ignore fluctuations in capacitance due to heartbeats. Times during which the person's hand contacts the computing device and locations of the contact are determined (804) from the raw capacitance data indicative of the fluctuations. The extracted raw capacitance data is then processed to determine the person's heart rate (806, 808).

